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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,203	04/28/2005	Uwe Jahrmarkt	3081.101US01	9026
24113 7590 06/29/2007 PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100			EXAMINER CRUZ, MAGDA	
			ART UNIT 2851	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/533,203

Applicant(s)

JAHRMARKT ET AL.

Examiner

Magda Cruz

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because is not written in a single paragraph. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

2. The application has been filed without drawings. However, in order to expedite prosecution, the examiner used the drawings found in the US Pub. No. 2006/0050382 A1, which is the PGPub of the current application. The applicant is advised to file Figures 1-3 as shown in US Pub. No. 2006/0050382 A1.
3. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "adapter including an optical assembly" (see claim 1), "displaying a test image on the image display surface, in which the test image is an image combined from n views arranged in rows and/or columns" (see claim 13), an "adapter" (see claim 14) and "metal spring clips or an adhesive joint" (see claim 17) must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 11-12, 14-15 and 17-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Tung et al.

Tung et al. (WO 2003/034749 A1) disclose:

- Regarding claim 11, removing the front bezel from the 2D display screen (page 4, lines 1-3); attaching an adapter including an optical assembly for separating an image displayed on the image display surface into stereoscopic partial images, so that the optical assembly covers the image display surface (page 4, lines 3-5); aligning the optical assembly relative to the image display surface so that at least one stereoscopic partial image reaches one eye and at least one other stereoscopic partial image reaches the other eye of an observer (page 5, lines 22-23), who thus perceives a stereoscopic vision of the image displayed (page 5, lines 23-25).
- Regarding claim 12, the image display surface comprises the step of varying a position of the optical assembly jointly with the frame relative to the image display surface, or varying the position of the optical assembly

relative to the image display surface and relative to the frame (page 6, lines 6-8).

- Regarding claim 14, the front bezel, or an alternate front bezel (Figure 3, i.e. display bezel), is attached so that it covers a marginal zone of the adapter (Figure 3, element 300).
- Regarding claim 15, a frame (Figure 3, element 306) whose geometric extension parallel to the image display surface (Figure 3, element 304) approximately equals an extension of the front bezel of the 2D display screen (Figure 3, i.e. laptop display); a front pane including an optical structure in the form of an array of wavelength filters, lenticulars or in the form of a barrier screen (page 2, lines 4-8), that separates an image displayed on the image display surface into stereoscopic partial images, thus implementing image separation for autostereoscopic display (page 2, lines 9-11), wherein a margin of the front pane is connected to the frame by fastening (Figure 3, element 302).
- Regarding claim 17, the front pane is fastened to the frame by metal spring clips (Figure 3, elements 302 and 306).
- Regarding claim 18, the frame comprises two adhesive surfaces (i.e. rubber foot), with one adhesive surface being used for fixation to the outer rim of the screen and the other adhesive surface holding the front pane (page 4, lines 28-30).

- Regarding claim 19, the front pane including the optical structure that effects image separation is held at a defined distance from the image display surface (page 3, lines 3-7), the defined distance being defined by the profile depth (i.e. the depth of the spring-clip attachment).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tung et al. in view of Moseley et al.

Tung et al. (WO 2003/034749 A1) disclose the salient features of the present invention as explained above, except (regarding claim 16) an optical structure comprising a wavelength filter array laminated to or printed on the front pane, and (regarding claim 20) a front pane comprising shatter resistant glass and a planar, electrically conductive structure that shields observers from electromagnetic radiation.

Moseley et al. (US Patent Number 6,046,849) teach:

- Regarding claim 16, an optical structure comprising a wavelength filter array (Figure 6a, element 21) laminated to or printed on the front pane (Figure 6a, elements 1, 3 and 20).

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- Regarding claim 20, a front pane (Figure 11a, elements 1, 3 and 20) comprising shatter resistant glass and a planar, electrically conductive structure that shields observers from electromagnetic radiation (i.e. switchable diffuser; Figure 11a, element 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the optical structures shown by Moseley et al. in combination with Tung et al.'s invention, for the purpose of having a switchable 2D/3D displays that may be used in games apparatuses, computer monitors, laptop displays, work stations and professional imaging, for instance for medical, design or architectural use.

***Allowable Subject Matter***

10. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 13, the prior art of record neither shows nor suggests a method comprising the step of displaying a test image on the image display surface, in which the test image is an image combined from  $n$  ( $n > 2$ ) views arranged in rows and/or columns, and in which exactly  $(n-1)$  of the views correspond to a completely black area each and exactly one view corresponds to a completely white or completely blue or



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completely green or completely red area, continuously displacing a position of the optical assembly relative to the image display surface, with simultaneous visual or opto-electronic inspection of the monocular images from an arbitrary but permanent monocular viewing position.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freude et al. (DE 20013873 U1) disclose an arrangement for selective presentation of 2D or 3D pictures contents comprising a picture display apparatus and an optical structural group.

Eichenlaub (US Patent Number 5,500,765) teaches a convertible 2D/3D autostereoscopic display.

McKee, Jr. (US Pub. No. 2004/0263970) shows a convertible autostereoscopic flat panel display.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (571) 272-2114. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DIANE LEE  
SUPERVISORY PATENT EXAMINER

Magda Cruz  
Patent Examiner

June 21, 2007